

IN THE CLAIMS:

Please amend claim 1 as follows.

1. (Currently Amended) A method of recording contents information in a track of an optical disk having first index information recorded along the track, the first index information indicating absolute position or time at a first progression rate along the track, comprising:

generating second index information when a second progression rate along the track is different from the first progression rate determined by the first index information; and

adding the second index information into the contents information ~~such that the second index information is written on the track together with the contents information;~~ and

recording the second index information together with the contents information progressively on the track at the second progression rate.

2. (Previously Presented) The method according to claim 1, wherein the step of generating generates the second index information having the second progression rate along the track, which is set greater than the first progression rate determined by the first index information.

3. (Previously Presented) The method according to claim 1, wherein the step of generating generates the second index information having the second progression rate along the track, which is set smaller than the first progression rate determined by the first index information.

4. (Previously Presented) An optical disk recording apparatus for recording contents information on a track of an optical disk having first index information recorded along the track, the first index information indicating absolute position or time along the track at a first progression rate, the apparatus comprising:

a recording section that successively modulates a laser beam by the contents information and irradiates the modulated laser beam onto the optical disk to thereby record the contents information on the track at a second progression rate;

a generating section that generates second index information when the second progression rate along the track is different from the first progression rate determined by the first index information; and

a feeding section that feeds the generated second index information and the contents information to the recording section at a clock rate corresponding to the second progression rate along the track, thereby enabling the recording section to write the second index information on the track together with the contents information at the second progression rate.

5. (Previously Presented) An optical disk recording apparatus for recording contents information on a track of an optical disk having first index information recorded along the track, the first index information indicating absolute position or time along the track at a first progression rate, the apparatus comprising:

a recording section that successively modulates a laser beam by the contents information and irradiates the modulated laser beam onto the optical disk to thereby record the contents information on the track at a second progression rate;

a reproducing section that reproduces the first index information recorded along the track based on the laser beam reflected from the optical disk;

a generating section that generates second index information when the second progression rate along the track is a multiple of the first progression rate determined by the reproduced first index information; and

a feeding section that feeds the generated second index information and the contents information to the recording section at a clock rate corresponding to the multiple of the first progression rate, thereby enabling the recording section to write the second index information on the track together with the contents information at the multiple of the first progression rate.

6. (Previously Presented) An optical disk recording apparatus for recording contents information on a track of an optical disk having first index information recorded along the track, the first index information indicating absolute position or time along the track at a first progression rate, the track being wobbled in a predetermined format, the apparatus comprising:

a recording section that successively modulates a laser beam by the contents information and irradiates the modulated laser beam onto the track while the optical disk is rotated, to thereby record the contents information on the track at a second progression rate;

a detecting section that detects a signal representing the wobble and having a frequency from the laser beam reflected by the optical disk;

a driving section that rotates the optical disk for maintaining the frequency of the detected signal to a fixed value;

a reproducing section that reproduces the first index information recorded along the track based on the laser beam reflected from the optical disk;

a generating section that generates second index information when the second progression rate is a multiple of the first progression rate determined by the reproduced first index information; and

a feeding section that feeds the generated second index information and the contents information to the recording section at a clock rate corresponding to the multiple of the first progression rate, thereby enabling the recording section to write the second index information on the track together with the contents information at the multiple of the first progression rate.

7-20 (Cancelled).

21. (Previously Presented) An optical disk recording apparatus for recording contents information on a track of an optical disk having first index information recorded along the track, the first index information indicating absolute position or time along the track at a first progression rate, the track being wobbled according to the first index information, the apparatus comprising:

a recording section that successively modulates a laser beam by the contents information and irradiates the modulated laser beam onto the track while the optical disk is rotated, to thereby record the contents information on the track at a second progression rate;

a reproducing section that reproduces the first index information recorded along the track based on the laser beam reflected from the optical disk;

a generating section that generates second index information when the second progression rate along the track is a multiple of the first progression rate determined by the reproduced first index information; and

a feeding section that feeds the generated second index information and the contents information to the recording section at a clock rate corresponding to the multiple of the first progression rate determined by the reproduced first index information, thereby enabling the recording section to write the second index information on the track together with the contents information at the multiple of the first progression rate along the track.